A fact sheet from the Washington State Department of Agriculture

March 5, 2003

# **Tukwila Greenbelt Revegetation Project**

The Washington State Department of Agriculture is revegetating a three-acre greenbelt in the Tukwila neighborhood where trees were removed last summer to prevent the establishment of the citrus longhorned beetle, one of the worst insect pests to ever enter the United States. The citrus longhorned beetle is a tree-killer. It attacks healthy trees -- more than 40 varieties of hardwood and fruit trees -- and has no natural enemies in the U.S.

The greenbelt in Tukwila is a large, sensitive area of steep slopes and wetlands owned by private citizens and protected by city ordinance. More than 1,000 trees and shrubs are being planted in the greenbelt by Blue Sky Landscaping Services of Puyallup under contract with WSDA. The landscaper will also carry out soil stabilization work.

The revegetation plan was prepared for WSDA by an environmental engineering firm. The plants are being purchased from Storm Lake Growers of Snohomish.

The planting and soil stabilization work is expected to begin in early March 2003 and take about two weeks to complete. The greenbelt is being revegetated by WSDA at no cost to the property owners. Funding for the \$45,000 project is provided by the U.S. Forest Service.

## Goals of the revegetation plan

- Revegetate the greenbelt
- Stabilize slopes and soil in the greenbelt
- Re-establish habitat
- Re-establish aesthetic values

## Actions specified in the plan

- Plant 1,029 trees, shrubs, seedlings, and cuttings.
- Place about 950 feet of sediment barriers (made of biodegradable material) along steep slopes of the greenbelt to prevent erosion.
- Seed and mulch about 60,000 square feet of bare soil to prevent erosion.
- Construct compost berms along the top of five steep slopes to prevent erosion.

	Shrubs		
Common Name	Number	Minimum height	
Common snowberry	72	18 in.	
Redstem ceanothus	54	24 in.	
Lewis mockorange	38	24 in.	
Pacific ninebark	21	24 in.	
Blue elderberry	13	24 in.	
Ocean spray	10	24 in.	
Red osier dogwood (cuttings)	400	20 in.	
Total	608		

	Small Trees		Tree Seedlings	
Common Name	Number	Minimum height	Number	Minimum height
Western red cedar	26	36 in.	50	18 in.
Douglas fir	11	36 in.	115	18 in.
Grand fir	5	36 in.	100	18 in.
Pacific madrone	5	18 in.	-	
Western hemlock	4	36 in.	105	18 in.
Total	51		370	

#### Vegetation to be planted

The plan calls for planting 421 trees and 608 shrubs. The plants are native plant species occurring naturally in western Washington that are not a host for the citrus longhorned beetle.

#### Sediment barrier construction

About 950 feet of round, 9-inch diameter sediment barriers will be placed at various locations along steep slopes of the greenbelt. The 9-inch diameter barriers will be made of rice straw, wheat straw, excelsior (curled wood shavings), coir (fiber from the outer husks of coconuts), or other approved natural biodegradable material. The barriers will be held together with biodegradable netting. Stakes, approximately 1 inch x 1 inch x 24 inches, of untreated softwood or hardwood will hold the barriers in place on the slopes.

## Mulching and seeding bare soil

With one exception, grass seed applied to the bare soil will be species native to western Washington. The exception is *Regreen*, a sterile grass that germinates quickly and grows fast relative to native species, but then dies out after a couple of years when native species have become well established. *Regreen* provides an excellent nurse crop for developing trees and shrubs.

#### Construction of berms

Compost berms will be constructed along the top of five steep slopes to prevent runoff flowing directly onto the steep slopes. The berms will be made of compost from well-decomposed organic matter, and will be 12 to 18 inches high and 2 to 3 feet wide.

### Other actions specified in the plan

The contractor will not only plant trees, shrubs, seedlings, and cuttings but also maintain the area for two years to ensure successful establishment. During the two-year establishment period, the contractor will:

- Remove weeds within five feet of planted trees and shrubs.
- Water plants as necessary to maintain and promote healthy growth.
- Ensure survival and vigorous growth of all plants by also controlling weeds, controlling pests, replacing missing or dead plants, and maintaining mulch around the plants. "Successful plant establishment" is defined as:
  - a) 90 percent survival and vigorous growth of trees and shrubs.
  - b) 75 percent survival and vigorous growth of seedlings.
  - c) 50 percent survival of cuttings.

## **Other Revegetation Efforts**

More than 1,000 hardwood and fruit trees in Tukwila were removed last summer. To minimize both the environmental and aesthetic consequences, WSDA, in cooperation with the nursery industry, developed a tree replacement program that provided property owners with vouchers to replace trees removed from their yards. The value of a voucher was based on the number, size and location of trees that were removed. Several of the 37 property owners have already purchased and planted trees with their vouchers, which are redeemable through 2007.